12-Week, Full-Time Data Science Bootcamp

Develop expertise in R, Python, Hadoop and Spark in just 12 weeks, while enjoying our support as we lift your career

Sep 26 - Dec 23, 2016 | Jan 9 - Mar 31, 2017
New York | Online Bootcamp

Apply Online:
nycdatascience.com/data-science-bootcamp/

Overview
In this program students will learn beginner and intermediate levels of Data Science with R, Python & Hadoop as well as the most popular and useful packages like dplyr, scikit-learn, and more. Students will work on five projects throughout the bootcamp. Along the way, students will have assistance in preparing for the job search through resume review and interview preparation.

Pre-Work
Tailored study plans are developed for each student as part of the preparation for joining the bootcamp. Students are encouraged to take our weekend courses in R and Python for free.

Week 1 | Data Science Toolkit
Learn to work from the command line - a must have skill for all data scientists. Work with basic Linux commands, text editing, and Git for version control. MySQL is taught with extensive practice on data manipulation.

Week 1 - 2 | Data Analytics & Visualization with R
Dive deep into R programming language from basic syntax to advanced packages and data visualization (e.g. reshape2, dplyr, string manipulation, ggplot2, R Shiny). Carry out a mini data analysis & visualization project. Create a data-centric application with interactive visualizations.

Week 3 - 4 | Machine Learning with R - Part I
Descriptive statistics, hypothesis testing, missingness, imputation & KNN, simple linear regression, multiple linear regression, generalized linear models, principle components analysis, Ridge/Lasso regression.

Week 5 - 6 | Data Analytics & Visualization with Python
Basic Python programming, followed by versatile packages such as Numpy, SciPy, Matplotlib, Pandas, and Beautifulsoup. Exposure to NoSQL and MongoDB. Complete a Python web scraping project.

Week 7 - 8 | Machine Learning with R - Part II
Trees, random forests, bagging, boosting, support vector machines, neural networks, natural language processing, time series analysis, unsupervised learning. Complete a Kaggle competition.

Week 9 | Machine Learning with Python
Deepen machine learning skills with scikit-learn. Focus on data cleaning, feature extraction, modeling and model selection using regression, SVM, PCA, tree models, clustering and more.

Week 10 | High Performance Computing, Hadoop, & Spark
Learn the concepts of high performance computing with parallel computing skills in Python and R. Introduction to MapReduce, Hadoop, Hive, Spark, and Spark MLib.

Week 11 - 12 | Capstone Project & Job Placement Support
Complete a capstone project. Resume review, tips of interview skills, and opportunities to interview with potential employers.

Project 1: Exploratory Data Visualization with R
Project 2: R Shiny Interactive Application
Project 3: Python Web Scraping
Project 4: Machine Learning
Project 5: Capstone Project

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